II

RAW SEQUENCE LISTING   DATE: 02/19/2003
PATENT APPLICATION: **US/09/838,858**   TIME: 13:15:41

Input Set : **A:\09838858 sequence listing.txt**
Output Set: **N:\CRF4\02192003\I838858.raw**

```
 4 <110> APPLICANT: Mansfield, Gary S.
 5        Mitchell, Lloyd G.
 6        Garcia-Blanco, Mariano A.
 7        Walsh, Christopher E.
 8        Chao, Hengjun
10 <120> TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR USE IN
11        SPLICEOSOME MEDIATED RNA TRANS-SPLICING
14 <130> FILE REFERENCE: A31304-BAD 072874.01
16 <140> CURRENT APPLICATION NUMBER: 09/838,858
17 <141> CURRENT FILING DATE: 2001-04-20
19 <150> PRIOR APPLICATION NUMBER: 09/756,096
20 <151> PRIOR FILING DATE: 2001-02-08
22 <150> PRIOR APPLICATION NUMBER: 09/158,863
23 <151> PRIOR FILING DATE: 1998-09-23
25 <150> PRIOR APPLICATION NUMBER: 09/133,717
26 <151> PRIOR FILING DATE: 1998-08-13
28 <150> PRIOR APPLICATION NUMBER: 09/087,233
29 <151> PRIOR FILING DATE: 1998-05-28
31 <150> PRIOR APPLICATION NUMBER: 08/766,354
32 <151> PRIOR FILING DATE: 1996-12-13
34 <150> PRIOR APPLICATION NUMBER: 60/008,317
35 <151> PRIOR FILING DATE: 1995-12-15
37 <160> NUMBER OF SEQ ID NOS: 113
39 <170> SOFTWARE: FastSEQ for Windows Version 4.0
41 <210> SEQ ID NO: 1
42 <211> LENGTH: 132
43 <212> TYPE: DNA
44 <213> ORGANISM: Homo sapien
46 <400> SEQUENCE: 1
47 caggggacgc accaaggatg gagatgttcc agggcgctga tgatgttgtt gattcttctt 60
48 aaatcttttg tgatggaaaa cttttcttcg taccacggga ctaaacctgg ttatgtagat 120
49 tccattcaaa aa                                                    132
51 <210> SEQ ID NO: 2
52 <211> LENGTH: 29
53 <212> TYPE: DNA
54 <213> ORGANISM: Corynebacterium diptheriae
56 <400> SEQUENCE: 2
57 ggcgctgcag ggcgctgatg atgttgttg                                   29
59 <210> SEQ ID NO: 3
60 <211> LENGTH: 36
61 <212> TYPE: DNA
62 <213> ORGANISM: Corynebacterium diptheriae
64 <400> SEQUENCE: 3
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ENTERED

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/838,858

DATE: 02/19/2003
TIME: 13:15:41

Input Set : A:\09838858 sequence listing.txt
Output Set: N:\CRF4\02192003\I838858.raw

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65 ggcgaagctt ggatccgaca cgatttcctg cacagg                                36
67 <210> SEQ ID NO: 4
68 <211> LENGTH: 68
69 <212> TYPE: DNA
70 <213> ORGANISM: Artificial Sequence
72 <220> FEATURE:
73 <223> OTHER INFORMATION: Oligonucleotide primer
75 <400> SEQUENCE: 4
76 aattctctag atgcttcacc cgggcctgac tcgagtacta actggtacct cttctttttt 60
77 ttcctgca                                                                 68
79 <210> SEQ ID NO: 5
80 <211> LENGTH: 60
81 <212> TYPE: DNA
82 <213> ORGANISM: Artificial Sequence
84 <220> FEATURE:
85 <223> OTHER INFORMATION: Oligonucleotide primer
87 <400> SEQUENCE: 5
88 ggaaaaaaaa gaagaggtac cagttagtac tcgagtcagg cccgggtgaa gcatctagag 60
91 <210> SEQ ID NO: 6
92 <211> LENGTH: 24
93 <212> TYPE: DNA
94 <213> ORGANISM: Artificial Sequence
96 <220> FEATURE:
97 <223> OTHER INFORMATION: Oligonucleotide primer
99 <400> SEQUENCE: 6
100 tcgagcaacg ttataataat gttc                                              24
102 <210> SEQ ID NO: 7
103 <211> LENGTH: 24
104 <212> TYPE: DNA
105 <213> ORGANISM: Artificial Sequence
107 <220> FEATURE:
108 <223> OTHER INFORMATION: Oligonucleotide primer
110 <400> SEQUENCE: 7
111 tcgagaacat tattataacg ttgc                                              24
113 <210> SEQ ID NO: 8
114 <211> LENGTH: 35
115 <212> TYPE: DNA
116 <213> ORGANISM: Artificial Sequence
118 <220> FEATURE:
119 <223> OTHER INFORMATION: Oligonucleotide primer
121 <400> SEQUENCE: 8
122 aattctctag atcaggcccg ggtgaagcac tcgag                                  35
124 <210> SEQ ID NO: 9
125 <211> LENGTH: 25
126 <212> TYPE: DNA
127 <213> ORGANISM: Artificial Sequence
129 <220> FEATURE:
130 <223> OTHER INFORMATION: Oligonucleotide primer
132 <400> SEQUENCE: 9
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RAW SEQUENCE LISTING
PATENT APPLICATION: **US/09/838,858**

DATE: 02/19/2003
TIME: 13:15:41

Input Set : **A:\09838858 sequence listing.txt**
Output Set: **N:\CRF4\02192003\I838858.raw**

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133 tgcttcaccc gggcctgatc tagag                                       25
135 <210> SEQ ID NO: 10
136 <211> LENGTH: 18
137 <212> TYPE: DNA
138 <213> ORGANISM: Homo sapien
140 <400> SEQUENCE: 10
141 tgcttcaccc gggcctga                                                18
143 <210> SEQ ID NO: 11
144 <211> LENGTH: 16
145 <212> TYPE: DNA
146 <213> ORGANISM: Homo sapien
148 <400> SEQUENCE: 11
149 ctcttctttt ttttcc                                                  16
151 <210> SEQ ID NO: 12
152 <211> LENGTH: 18
153 <212> TYPE: DNA
154 <213> ORGANISM: Homo sapien
156 <400> SEQUENCE: 12
157 caacgttata ataatgtt                                                18
159 <210> SEQ ID NO: 13
160 <211> LENGTH: 16
161 <212> TYPE: DNA
162 <213> ORGANISM: Homo sapien
164 <400> SEQUENCE: 13
165 ctgtgattaa tagcgg                                                  16
167 <210> SEQ ID NO: 14
168 <211> LENGTH: 16
169 <212> TYPE: DNA
170 <213> ORGANISM: Homo sapien
172 <400> SEQUENCE: 14
173 cctggacgcg gaagtt                                                  16
175 <210> SEQ ID NO: 15
176 <211> LENGTH: 51
177 <212> TYPE: DNA
178 <213> ORGANISM: Homo sapien
180 <400> SEQUENCE: 15
181 ctgggacaag gacactgctt cacccggtta gtagaccaca gccctgaagc c            51
183 <210> SEQ ID NO: 16
184 <211> LENGTH: 17
185 <212> TYPE: DNA
186 <213> ORGANISM: Homo sapien
188 <400> SEQUENCE: 16
189 cttctgtttt ttttctc                                                 17
191 <210> SEQ ID NO: 17
192 <211> LENGTH: 16
193 <212> TYPE: DNA
194 <213> ORGANISM: Homo sapien
196 <400> SEQUENCE: 17
197 cttctgtatt attctc                                                  16
```

RAW SEQUENCE LISTING   DATE: 02/19/2003
PATENT APPLICATION: **US/09/838,858**   TIME: 13:15:41

Input Set : **A:\09838858 sequence listing.txt**
Output Set: **N:\CRF4\02192003\I838858.raw**

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199 <210> SEQ ID NO: 18
200 <211> LENGTH: 16
201 <212> TYPE: DNA
202 <213> ORGANISM: Homo sapien
204 <400> SEQUENCE: 18
205 gttctgtcct tgtctc                                              16
207 <210> SEQ ID NO: 19
208 <211> LENGTH: 29
209 <212> TYPE: DNA
210 <213> ORGANISM: Corynebacterium diptheriae
212 <400> SEQUENCE: 19
213 ggcgctgcag ggcgctgatg atgttgttg                                29
215 <210> SEQ ID NO: 20
216 <211> LENGTH: 36
217 <212> TYPE: DNA
218 <213> ORGANISM: Corynebacterium diptheriae
220 <400> SEQUENCE: 20
221 ggcgaagctt ggatccgaca cgatttcctg cacagg                        36
223 <210> SEQ ID NO: 21
224 <211> LENGTH: 21
225 <212> TYPE: DNA
226 <213> ORGANISM: Corynebacterium diptheriae
228 <400> SEQUENCE: 21
229 catcgtcata atttccttgt g                                        21
231 <210> SEQ ID NO: 22
232 <211> LENGTH: 20
233 <212> TYPE: DNA
234 <213> ORGANISM: Corynebacterium diptheriae
236 <400> SEQUENCE: 22
237 atggaatcta cataaccagg                                          20
239 <210> SEQ ID NO: 23
240 <211> LENGTH: 20
241 <212> TYPE: DNA
242 <213> ORGANISM: Corynebacterium diptheriae
244 <400> SEQUENCE: 23
245 gaaggctgag cactacacgc                                          20
247 <210> SEQ ID NO: 24
248 <211> LENGTH: 20
249 <212> TYPE: DNA
250 <213> ORGANISM: Homo sapien
252 <400> SEQUENCE: 24
253 cggcaccgtg gccgaagtgg                                          20
255 <210> SEQ ID NO: 25
256 <211> LENGTH: 30
257 <212> TYPE: DNA
258 <213> ORGANISM: Homo sapien
260 <400> SEQUENCE: 25
261 accggaattc atgaagccag gtacaccagg                               30
263 <210> SEQ ID NO: 26
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RAW SEQUENCE LISTING
PATENT APPLICATION: **US/09/838,858**

DATE: 02/19/2003
TIME: 13:15:41

Input Set : **A:\09838858 sequence listing.txt**
Output Set: **N:\CRF4\02192003\I838858.raw**

```
264  <211> LENGTH: 20
265  <212> TYPE: DNA
266  <213> ORGANISM: Homo sapien
268  <400> SEQUENCE: 26
269  gggcaaggtg aacgtggatg                                        20
271  <210> SEQ ID NO: 27
272  <211> LENGTH: 19
273  <212> TYPE: DNA
274  <213> ORGANISM: Homo sapien
276  <400> SEQUENCE: 27
277  atcaggagtg gacagatcc                                         19
279  <210> SEQ ID NO: 28
280  <211> LENGTH: 39
281  <212> TYPE: DNA
282  <213> ORGANISM: Artificial Sequence
284  <220> FEATURE:
285  <223> OTHER INFORMATION: Oligonucleotide primer
287  <400> SEQUENCE: 28
288  gcatgaattc ggtaccatgg gggggttctc atcatcatc                   39
290  <210> SEQ ID NO: 29
291  <211> LENGTH: 36
292  <212> TYPE: DNA
293  <213> ORGANISM: Artificial Sequence
295  <220> FEATURE:
296  <223> OTHER INFORMATION: Oligonucleotide primer
298  <400> SEQUENCE: 29
299  ctgaggatcc tcttacctgt aaacgcccat actgac                      36
301  <210> SEQ ID NO: 30
302  <211> LENGTH: 38
303  <212> TYPE: DNA
304  <213> ORGANISM: Artificial Sequence
306  <220> FEATURE:
307  <223> OTHER INFORMATION: Oligonucleotide primer
309  <400> SEQUENCE: 30
310  gcatggtaac cctgcagggc ggcttcgtct gggactgg                    38
312  <210> SEQ ID NO: 31
313  <211> LENGTH: 38
314  <212> TYPE: DNA
315  <213> ORGANISM: Artificial Sequence
317  <220> FEATURE:
318  <223> OTHER INFORMATION: Oligonucleotide primer
320  <400> SEQUENCE: 31
321  ctgaaagctt gttaacttat tatttttgac accagacc                    38
323  <210> SEQ ID NO: 32
324  <211> LENGTH: 47
325  <212> TYPE: DNA
326  <213> ORGANISM: Artificial Sequence
328  <220> FEATURE:
329  <223> OTHER INFORMATION: Oligonucleotide primer
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 02/19/2003
PATENT APPLICATION: **US/09/838,858**   TIME: 13:15:42

Input Set : **A:\09838858 sequence listing.txt**
Output Set: **N:\CRF4\02192003\I838858.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:54; N Pos. 57,58,59,60,61,62,63,64,65,66,67,68,69,70
Seq#:55; N Pos. 57,58,59,60,61,62,63,64,65,66,67,68,69,70
Seq#:56; N Pos. 57,58,59,60,61,62,63,64,65,66,67,68,69,70
Seq#:85; N Pos. 7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27
Seq#:85; N Pos. 28,29,30
Seq#:100; N Pos. 7,8,9,16,17,18